



Five-Year Review Report

First Five-Year Review Report

for

Neal's Dump

Owen County, Indiana

November 2003

PREPARED BY:

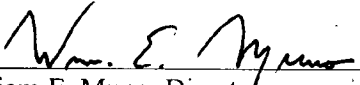
The United States Environmental Protection Agency

Region V

Chicago, Illinois

Approved by:

Date:


William E. Muno, Director
Superfund Division

11/7/03
Date

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List of Acronyms

ARARs	Applicable or Relevant and Appropriate Requirements
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CIC	Citizens Information Committee
COPA	Citizens Opposed to PCB Ash
CFR	Code of Federal Regulations
IDEM	Indiana Department of Environmental Management
NPL	National Priorities List
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OSC	On-Scene Coordinator
PCBs	Polychlorinated biphenyls
PPB	Parts per billion
PPM	Part per million
ROD	Record of Decision
RD/RA	Remedial Design/Remedial Action
TAG	Technical Assistance Grant
U.S. EPA	United States Environmental Protection Agency

Executive Summary

The remedy for the Neal's Dump site in Owen County, Indiana, included the removal of PCB contaminated soil to an approved landfill, off-site incineration of capacitors, backfilling the excavated area with clean fill and the implementation of institutional controls. The residential cleanup achieved a 0.8 parts per million on average PCB level. The site achieved construction completion with the signing of the Preliminary Close Out Report on March 17, 1999. The site was delisted off the National Priorities List (NPL) on October 4, 1999.

The conclusion of this five-year review is that the groundwater monitoring at the four monitoring wells and two residential wells can be eliminated. The analysis of the data shows that PCBs have not affected the two residential wells and the groundwater monitoring wells have shown only low levels of PCBs with no upward trend. PCBs have not been detected in any of the six wells since August 8, 2001. The U.S. EPA had determined that the remedy is protective of human health and the environment.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site name (from WasteLan): Neal's Dump		
EPA ID (from WasteLan): IND980794549		
Region: 5	State: IN	City/County: Owen County
SITE STATUS		
NPL status: Final		
Remediation status: Construction Pursuant to ROD Amendment Completed		
Multiple OU's: No	Construction completion date: March 17, 1999	
Has site been put into reuse: Yes		
REVIEW STATUS		
Lead Agency: U.S. EPA		
Author name: Thomas Alcamo		
Author title: Remedial Project Manager	Author affiliation: U.S. EPA Region 5	
Review period: 7/01/03 to October 15, 2003		
Date(s) of site inspection: September 25, 2003		
Type of Review: Pre-SARA		
Review number: first		
Triggering action: Construction Completion		
Triggering action date (from Wastelan): October 16, 1998		
Due date (five years after triggering date): October 16, 2003		

FIVE-YEAR REVIEW SUMMARY FORM, cont'd.

Issues:

No issues identified.

Recommendations and Follow-up Actions:

The groundwater monitoring should be eliminated.

Protectiveness Statement(s):

The remedy at the Neal's Dump site is protective of human health and the environment.

**Neal's Dump Superfund Site
Owen County
First Five-Year Review Report**

I. Introduction

The purpose of the five-year review is to determine whether the remedy at the site is protective of human health and the environment. The methods, findings and conclusions of the reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and makes recommendations to address them.

The Agency is preparing this five-year review pursuant to CERCLA Section 121 and the National Contingency Plan (NCP). CERCLA Section 121 states:

*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action **no less often** than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgement of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The agency interpreted this requirement further in the NCP, 40 CFR Section 300.430(f)(4)(ii) states:

*If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such actions **no less often than every five years** after the initiation of the selected remedial action.*

The United States Environmental Protection Agency (U.S. EPA), Region V conducted a five-year review of the remedial actions implemented at the Neal's Dump site in Owen County, Indiana. This report documents the results of the review. The Indiana Department of Environmental Management (IDEM) provided support in the development of this five-year review.

This is the first five-year review for the Neal's Dump site. Construction was completed at the Neal's Dump site on March 17, 1999. The Neal's Dump site was delisted off the National Priorities List in October 1999. Groundwater monitoring is still occurring at the site and this five-year review is being completed to determine if the monitoring should continue, be modified or eliminated.

II. Site Chronology

Table 1 - Chronology of Site Events

Event	Date
Neal's Dump used as a landfill for Westinghouse electrical capacitors	1967 to 1971
Initial site inspection by U.S. EPA	May 1982
First interim remedial measures consisting of removal off-site of visible capacitors, erosion control measures, and placement of a security fence	December 1983
Consent Decree signed for the incineration of PCB contaminated material at six sites in or near Bloomington, Indiana (Neal's Dump one of six)	August 22, 1985
Site placed on National Priorities List (NPL)	June 10, 1986
State of Indiana passes law forbidding the review of the incinerator permit, preventing implementation of incineration remedy.	1991
The Consent Decree parties (Westinghouse, U.S. EPA, State of Indiana, Monroe County, and City of Bloomington) agree to explore other remedies for the six Consent Decree sites through the operating principals.	February 4, 1994
Due to a lack of progress on developing new remedies, Federal Judge S. Hugh Dillin issues judicial order stating that all source control measures for the six sites must be completed by December 31, 1999. Assigns Special Master (Magistrate Judge Kennard Foster) to oversee progress.	November 1997
ROD Amendment signed for the cleanup of the Neal's Dump site. Site remediated to high occupancy/residential standards for PCBs with soil removed to off-site landfill and capacitors incinerated off-site.	October 16, 1998
Construction begins	October 1998
Construction Completed	March 17, 1999
Consent Decree parties make progress in negotiations for the cleanup of the six sites and Federal Judge S. Hugh Dillin agrees to extend deadline to December 31, 2000.	February 1999
Preliminary Close-Out Report signed	March 17, 1999
Long-Term Groundwater Monitoring Plan approved	May 1999
Site Delisted off NPL	October 4, 1999

III. Background

Physical Characteristics

Neal's Dump is located in Owen County, approximately four miles southwest of the Town of Spencer, and approximately 15 miles northwest of the City of Bloomington. The site is approximately 1-acre in size and is bounded by Pottersville Road to the east, Old Morrow Road to the south and the White River to the north and west. Immediately adjacent to the site are several private residential properties, these are located near the southern fence line of the Site. The Site is situated on the crest of a hill which slopes westerly toward the floodplain of the White River. See Figure 1.

The soil conditions at the Site include an uppermost, unconsolidated unit described as a heterogeneous silty sand mixture varying in total thickness from 10 to 25 feet below grade. A silty clay till unit, which is approximately 17 to 25 feet thick, underlies this uppermost unit, and acts as an aquitard. Beneath the silty clay unit is a glacial sand and gravel unit that is generally 10 to 20 feet in thickness. The top of the unit occurs at about 540 to 500 foot elevation, or 40 to 50 feet beneath the ground surface. Beneath the sand is a 0 to 5 foot thick silt unit that overlies a clay unit. The clay overlies the limestone bedrock at depths of 70 to 80 feet.

Unconfined groundwater occurs in the uppermost silty sand unit and is encountered at 12 to 15 feet below grade. Groundwater flow in this unit is interpreted to be toward the northwest. A confined groundwater system exists in the deeper sand unit beneath the till, occurring at 37 to 45 feet below grade. Groundwater flow in this deeper unit is interpreted to be toward the west to the White River, which is believed to be the discharge boundary for this unit.

Land and Resource Use

The land in the vicinity of Neal's Dump is rural and residential. A number of homes are adjacent to the 1-acre site. The site was remediated to residential PCB cleanup standards. The groundwater underlying the site is used by two families for drinking water. The two residential wells are the White well and a well shared by the Eads and Hattins. The White's and Eads use the well for drinking water. In addition, 11 homes in the nearby Riverview Estates have drinking water wells. See Figure 2 and Figure 3.

History of Contamination

Neal's Dump was operated between 1967 and 1972 as a disposal site for household and industrial waste materials. From 1968 to 1972, Westinghouse, now doing business as Viacom, through its hauler disposed of capacitors, capacitor parts, filter aids and sawdust all containing PCBs. The site was owned by Ray Neal at the time of the disposal operations and the site is currently owned by Mary White.

Beginning in 1976, a series of site related investigations were conducted to characterize the Neal's Dump disposal area. These investigations included sampling and analysis of various environmental media including leachate, groundwater, soil and sediment. Soil samples showed PCB concentrations as high as 188,000 parts per million. In addition, non-invasive geophysical studies were performed to estimate the area and extent of buried metallic objects. Based on the geophysical survey, a surface area of one-half acre was identified as containing various sorts of metallic material. The area was estimated to have 14,000 cubic yards of waste material.

Initial Response

On January 4, 1983, the United States filed a civil action against Westinghouse, pursuant to Section 7003 of the Resource Conservation and Recovery Act (RCRA) and Sections 104, 106, and 107 of CERCLA, alleging an imminent and substantial endangerment to human health and the environment due to improper disposal of PCBs at two sites in the Bloomington area. During the fall of 1983, Viacom expressed its interest in negotiating a settlement of that suit as well as a civil action filed by the City of Bloomington for improper PCB disposal at two of the sites owned by the City. After negotiations among Viacom, U.S. EPA, the City of Bloomington, Monroe County, and the Indiana State Board of Health, a Consent Decree was signed in 1985 and subsequently entered by the court on August 22, 1985, for the cleanup of six sites, including Neal's Dump. The Consent Decree called for the construction of a permitted, Toxic Substances Control Act municipal approved solid waste incinerator to be used to destroy PCB contaminated material excavated from all six sites, including Neal's Dump. The Neal's Dump site was placed on the National Priorities List on June 10, 1986.

Public opposition to the incinerator arose before and after the entry of the Consent Decree. Applications for the necessary permits to design and build the incinerator were submitted by Viacom in 1991. Beginning in 1991, the Indiana State Legislature passed several laws intended to delay and block the implementation of the incineration remedy required in the 1985 Consent Decree. In February 1994, the parties agreed to jointly explore under the operating principles alternatives to the incineration remedy for the six sites, including Neal's Dump.

Due to a lack of progress in developing new site remedies, in November 1997, Federal Judge S. Hugh Dillin issued a judicial order stating that the six Consent Decree sites must be remediated by December 1999. The deadline was extended to December 2000. The cleanup of Neal's Dump was completed on March 17, 1999.

In December 1983, interim remedial measures were completed at Neal's Dump. These actions included the following:

- Removal of 46 exposed capacitors, capacitor paper and some soils in close proximity of the exposed capacitors. Approximately 60 capacitors were reburied at two locations within the dump.

- Seeding of disturbed areas so that a full coverage of vegetative growth was established and maintained.
- Implementation of erosion control measures including erosion control fences.
- Placement of a chain-link security fence around the site to restrict access and posting of warning signs.

Also, 11 residential drinking water wells near the Neal's Dump site located in the Riverview Estates were sampled in 1991 and showed no PCB contamination. Prior to the excavation activities in October 1998 at the site, additional investigations were completed in 1998 that included geophysical studies in combination with soil borings to better define the site perimeter.

Basis for Taking Action

At the Neal's Dump site, PCBs are the main contaminant of concern. PCBs have been discovered in soils and groundwater. The White and Eads/Hattin drinking water wells are 50 feet east of the site and 100 feet southwest of the site respectively. The White's and Ead's use the well for drinking water.

Prior to remediation, the waste material in Neal's Dump presented a significant risk to human health and the environment. The dump contained high concentrations of PCBs in a residential area with nearby residents using groundwater for drinking water.

IV. Remedial Actions

Remedy Selection

Based upon the operating principles that were agreed to in February 1994 and the court order requiring completion of source control remedy by December 31, 2000, the U.S. EPA on August 23, 1998, made available to the public the proposed plan for the Neal's Dump site. After addressing public comments, on October 18, 1998, the U.S. EPA signed a Record of Decision Amendment for the Neal's Dump site. The ROD Amendment modified the August 3, 1984 Enforcement Decision Document. The objective of the cleanup was to remediate the site to high occupancy/residential standards for reuse. The ROD Amendment called for the following:

- Excavation of the site soils to residential/high occupancy PCB cleanup standards with disposal of the soils in a off-site, permitted Toxic Substance Control Act/chemical waste landfill.
- Off-site incineration in a permitted, TSCA approved, incinerator of all capacitors.
- Placement of a minimum of a 10-inch soil cover over the excavated areas and

implementation of drainage controls, including providing a vegetative cover.

- Implementation of deed restrictions for the site.
- Monitoring groundwater surrounding the site for a minimum of five years.

Remedy Implementation

Viacom mobilized on the site on September 29, 1998, after approval by the governmental parties of the RD/RA Work Plan. A total of 7,250 tons of PCB contaminated material was excavated and disposed of at Wayne Disposal in Belleville, Michigan. In addition, 2,430 capacitors weighing approximately 250,000 pounds and filled with PCB oil were incinerated off-site in Port Arthur, Texas. After the excavation was completed, the residual PCBs remaining was 0.8 ppm on average, which is well under the 10 ppm PCB average concentration required at completion. The U.S. EPA split 20 verification samples with Viacom and the results were similar to Viacom's data. U.S. EPA also analyzed 7 samples for volatiles, semi-volatiles and metals and the results showed no additional risk. Sampling for PCBs and pesticides occurred for fill from the borrow areas to be used at the site.

Viacom completed the construction of the site on November 17, 1998, excluding the placement of topsoil, and the U.S. EPA completed the pre-final inspection on November 20, 1998. Viacom completed the final site grading and seeding and the final inspection was completed on June 8, 1999. Viacom has filed deed restrictions with Owen County preventing the installation of drinking water wells in the former dump site.

Operation and Maintenance

The Long-Term Groundwater Monitoring Plan was approved for the Neal's Dump site in May 1999. Four groundwater monitoring wells (MW-1D, MW-2D, MW-3D and MW-4D) and the White and Eads residential wells have been part of the monitoring plan since the excavation was completed. See Figure 2. Monitoring has occurred two times per year except in the year 2001 in which the monitoring frequency was increased to 4 times per year. The monitoring was increased to quarterly after monitoring well MW-2D had a PCB concentration greater than 0.5 ppb for the November 16, 2000 sampling event. Sampling occurred quarterly for one year after which the monitoring was reduced to two times per year based upon a demonstration by Viacom that an upward trend in PCB levels did not exist. Tables 1 through 6 show the historical sampling of the groundwater monitoring wells and residential wells.

It has been estimated that the annual operation and maintenance costs are approximately \$10,000.

V. Progress Since the Last Five-Year Review

This is the first five-year review for the site.

VI. Five-Year Review Process

Administrative Components

The U.S. EPA has given a Technical Assistance Grant (TAG) to the group Citizens Opposed to PCB Ash (COPA) and a Citizens Information Committee (CIC) has been formed to disseminate information regarding the Consent Decree sites and the PCB issues in Bloomington, Indiana. Public Meetings are held at least 4 times per year and the meetings are filmed for broadcast over the Bloomington cable access television. The CIC group was notified on October 14, 2003 that a five-year review was underway. The State of Indiana has reviewed the five-year review.

Community Involvement

The U.S. EPA notified COPA on October 14, 2003 that a five-year review was going to be completed for the Neal's Dump site. A discussion took place at the October 14, 2003 CIC meeting describing the five-year review process. A notice was placed in the Spencer Evening World newspaper on November 3, 2003 stating that a five-year review was being conducted.

Document Review

The five-year review consisted of a review of past and present groundwater monitoring data and hydrogeological data.

Data Review

The October 16, 1998 ROD Amendment called for the excavation of the Neal's Dump site to a 10 ppm or less PCB standard with placement of a 10-inch soil cover. The cleanup achieved a 0.8 ppm PCB cleanup standard on average. Since groundwater at the site showed low levels of PCB contamination and two individuals are drinking water from the wells located in the bedrock, groundwater monitoring was part of the final remedy and would be evaluated within five years to maintain, reduce, or eliminate the groundwater monitoring.

Four monitoring wells (MW-1, MW-2, MW-3 and MW-4) surround the former dump site. Each monitoring well is approximately 50 feet in depth and monitors the glacial sand and gravel unit. The two residential wells closest to the site are at the White residence about 50 feet east of the site and a well about 100 feet southwest of the site that serves the Eads and Hattin residences. The wells derive water from bedrock over 120 feet below ground surface.

In July 1991, an extensive residential well sampling event was conducted in the Riverview

Estates and the two wells adjacent to the site. A total of 13 wells were sampled and no PCBs were detected in any of the well samples. The White and Eads/Hattin residential wells have been sampled since July 1991. The wells have been sampled on a semi-annual basis since 1994. No PCBs have been detected in the Eads/Hattin well. PCBs were detected in the White well at 0.11 ppb on June 12, 1996. This detection is questionable based upon the data validation. Confirmation samples were collected on July 2, 1996 and July 19, 1996 and PCBs were not detected in either sample. See Tables 5 and 6.

The four existing monitoring wells completed in the glacial sand and gravel at the site have been sampled 39 times since May 1987. See Tables 1 through 4. Sampling has been on a quarterly or semi-annual basis. PCBs have been detected in all of the monitoring wells in low concentrations. PCBs have been detected at levels greater than the maximum contaminate level (MCL) of 0.5 ug/l (parts per billion) on five occasions since monitoring began in 1987. Three exceedences have been in MW-4D with the highest PCB value of 2.2 ug/l. One exceedance each has occurred in MW-2D and MW-3D. No exceedences have occurred in MW-1D. No detections in any of the four monitoring wells or two residential wells has occurred since May 8, 2001.

A trend analysis was conducted for the four monitoring wells surrounding the site using the Mann-Kendall test for trend. The trend test indicates that there is no significant upward trend in the PCB concentration at any monitoring well. A slight, but insignificant, downward trend in wells MW-3D and MW-4D has occurred.

Site Inspection

The last site inspection occurred on September 25, 2003, with U.S. EPA, State of Indiana and Viacom participating. Viacom has also inspected the site at least twice per year to obtain groundwater monitoring well samples. During the September 25, 2003, site inspection, the current owner Mary White was present and we discussed with her the purpose of the inspection and that the U.S. EPA was evaluating the groundwater monitoring program to determine if the program should be modified or eliminated. Ms. White indicated that after some rain events, water ponded in a low lying area at the site but that she did not want additional fill or grading to occur. Erosion was not identified as a problem during the inspection and the institutional controls are in place and have not been violated.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision document?

The remedial action described in the ROD Amendment was implemented and has met the cleanup objectives. The remediation will allow for residential development at the former dump. Groundwater monitoring was implemented to ensure that the excavation did not affect the two adjacent residential wells. The two residential wells (White and Eads/Hattin) have been non-detect since the completion of the cleanup. The Eads well has never shown a detection of PCBs.

On June 12, 1996, the White well did show a detection of PCB slightly above the detection limit of 0.1 ppb at a value of 0.11 ppb. The PCB detection in the White well may have been inaccurate based upon the data validation. The well was resampled on July 2, 1996 and July 19, 2002 and no PCBs were detected. A PCB trend analysis has been completed on the four groundwater monitoring wells and no upward trend has been demonstrated.

Deed restrictions are in place which prevent the installation of a drinking water well into the former dump. No other restrictions are required.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy selection still valid?

There have been no change in the physical conditions of the site that would affect the protectiveness of the remedy. The Remedial Action objectives achieved during the cleanup are still valid and protective of human health and the environment.

Changes in Standards and To Be Considereds

The applicable or relevant and appropriate requirements (ARARs) have not changed and no new standards or to be considered standards have been added since the ROD Amendment. The monitoring wells surrounding the site have periodically shown PCB concentration slightly above the detection limit of 0.1 ppb but no upward trend has been demonstrated. The two residential wells have not shown PCB contamination.

Changes in Exposure Pathways, Toxicity, and Other Contaminant Characteristics

The final cleanup level at the completion of the remediation was 0.8 ppm PCBs on average. The residential exposure assumptions used to determine the cleanup criteria have not changed since the ROD Amendment was completed. No changes in the toxicity factors for the contaminants of concern have occurred and the final cleanup criteria is still protective for residential development. The two residential wells adjacent to the site remain at a non-detect level for PCBs.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

Based upon the groundwater monitoring reports, and the site inspection, the remedy is functioning as intended by the ROD Amendment. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. The cleanup level of 0.8 ppm PCBs will allow for residential development with the only limitation including the placement of a drinking water well in the former dump site. The groundwater monitoring wells do not show an upward trend for PCBs and PCBs have not been detected in any of the wells since August 8, 2001. There is no other information that calls into question the protectiveness of

the remedy.

VIII. Issues

No issues have been identified.

IX. Recommendations and Follow-Up Actions

The U.S. EPA and the State of Indiana are recommending that the groundwater monitoring at the Neal's Dump site be eliminated. The groundwater data shows that the two residential wells adjacent to the site are not contaminated and the four groundwater monitoring wells have only shown periodic low level PCB concentrations. Evaluating the groundwater monitoring data shows that no upward trend is present in the groundwater monitoring data. A PCB detection has not occurred since August 8, 2001, in any of the monitoring wells or residential wells. The purpose of the groundwater monitoring was to evaluate the effectiveness of the site cleanup and to ensure the remedy did not affect the residential wells. Based upon the review of the historical PCB sampling data and taking into consideration the levels remaining after the completion of the soil cleanup, no further monitoring is necessary.

X. Protectiveness Statement

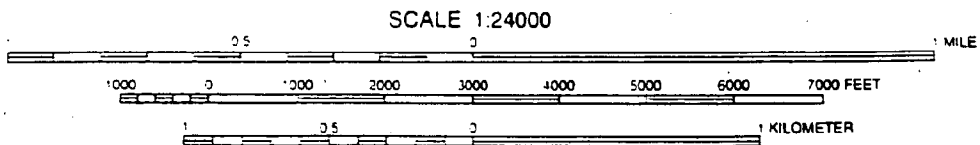
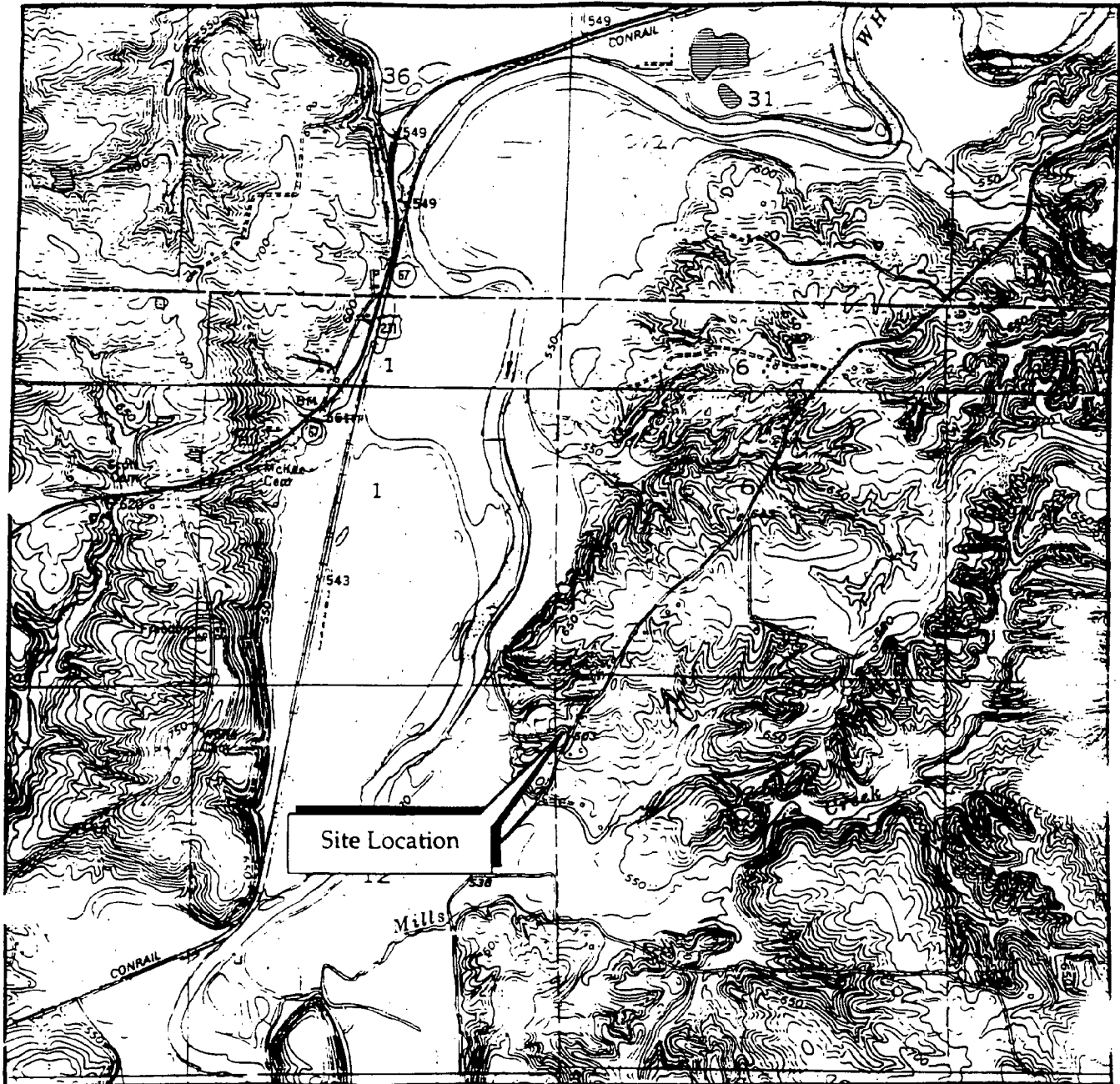
The remedial action at the Neal's Dump site is protective and the site is protective of human health and the environment.

XI. Next Review

The U.S. EPA believes that no future five year reviews may be required, but at least one more Five-Year review will be scheduled to ensure protectiveness of the remedy.

Appendix A

Figures and Charts



LEGEND

USGS 7.5 Minute Quadrangle:

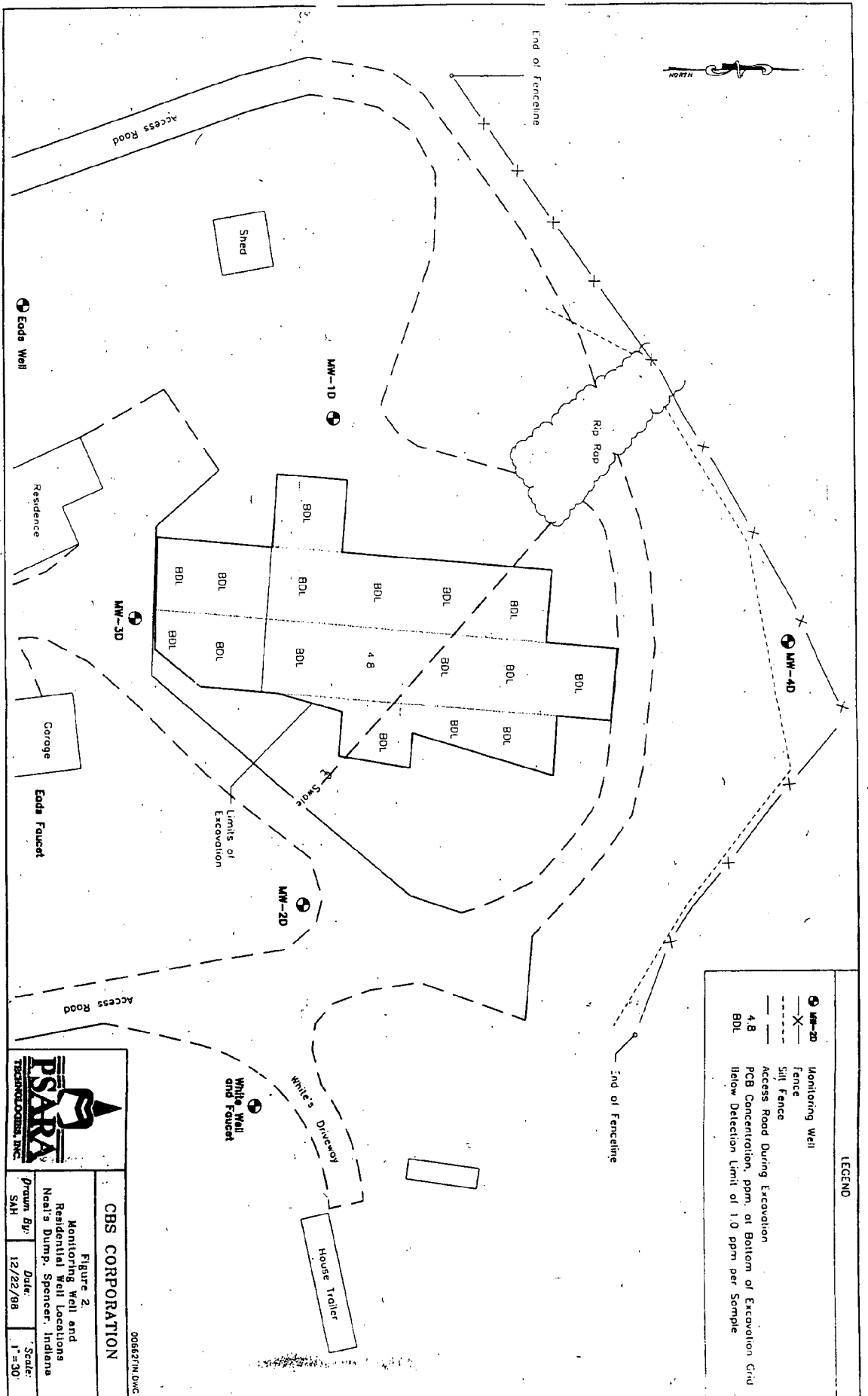
SPENCER, INDIANA
39086-C7-TF-024

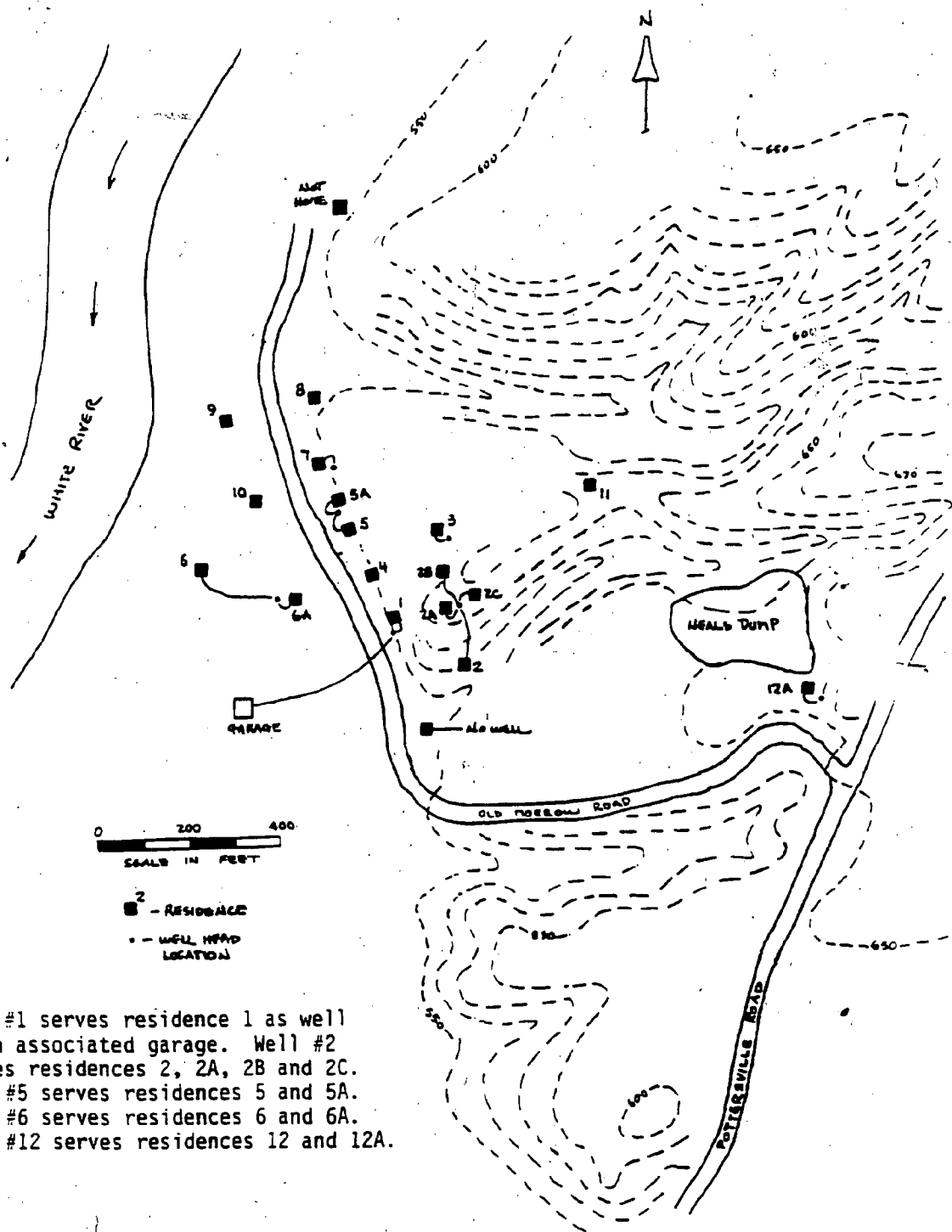
FREEDOM, INDIANA
39086-B7-TF-024

CBS CORPORATION

Figure 1. Site Location Map
Neal's Dump Site
Spencer, Indiana

Drawn By:	Date:	Scale:
TPO	12/8/98	1:24000





Westinghouse Environmental
And Geotechnical Services, Inc.

PROJECT TITLE:

LOCATION OF
RESIDENTIAL WELLS

NEAL'S DUMP - OWEN COUNTY, INDIANA

PROJECT NO.

REV-A-233

CHECKED BY:

DRAWN BY:

FIGURE:

14

SCALE:

AS SHOWN

DATE:

3-2-92

**Table 1 - Chronology of PCB analytical Results
Well 1D**

DATE SAMPLED	PCB CONCENTRATION (PPB)	DATE SAMPLED	PCB CONCENTRATION (PPB)
May 19, 1987	ND	June 13, 1996	BDL
May 3, 1989	ND	November 21, 1996	BDL/BDL
November 7, 1989	BDL	June 25, 1997	BDL
May 1, 1990	BDL	December 15, 1997	BDL/BDL
November 6, 1990	BDL	May 29, 1998	BDL
May 29, 1991	0.28	September 24, 1998	BDL/BDL
June 20, 1991	BDL	October 23, 1998	0.11
July 18, 1991	0.11	May 19, 1999	BDL/BDL
August 21, 1991	BDL	November 30, 1999	BDL/BDL
September 23, 1991	BDL	May 9, 2000	BDL/BDL
October 30, 1991	BDL	November 16, 2000	0.14J
November 18, 1991	BDL	February 19, 2001	0.13J
May 12, 1992	BDL	May 8, 2001	0.13J/BDL
November 19, 1992	BDL	August 9, 2001	BDL
May 26, 1993	BDL	December 4, 2001	BDL
November 18, 1993	0.45	February 12, 2002	BDL
May 27, 1994	0.38	August 21, 2002	BDL
November 17, 1994	0.28	March 20, 2003	BDL
May 26, 1995	BDL	August 1, 2003	BDL
November 30, 1995	BDL/BDL		
BDL - Below Detection Limit of 0.1 parts per billion J - Estimated Value			

BDL/BDL represents the normal sample and duplicate

**Table 2 - Chronology of PCB analytical Results
Well 2D**

DATE SAMPLED	PCB CONCENTRATION (PPB)	DATE SAMPLED	PCB CONCENTRATION (PPB)
May 20, 1987	ND	June 12, 1996	BDL
May 3, 1989	ND	November 20, 1996	BDL
November 7, 1989	BDL	June 24, 1997	BDL
May 1, 1990	BDL	December 15, 1997	BDL
November 6, 1990	BDL	May 28, 1998	BDL
May 29, 1991	0.43	September 23, 1998	BDL
June 20, 1991	BDL	October 22, 1998	BDL
July 18, 1991	0.22	May 19, 1999	BDL
August 21, 1991	BDL	November 30, 1999	BDL
September 23, 1991	BDL	May 9, 2000	BDL
October 30, 1991	BDL	November 16, 2000	0.56
November 18, 1991	BDL	February 19, 2001	0.10J
May 12, 1992	BDL	May 8, 2001	BDL
November 19, 1992	BDL	August 8, 2001	0.16J
May 26, 1993	BDL	December 4, 2001	BDL
November 18, 1993	BDL	February 12, 2002	BDL
May 27, 1994	0.11	August 21, 2002	BDL
November 17, 1994	0.39	March 20, 2003	BDL
May 26, 1995	BDL	August 1, 2003	BDL
November 29, 1995	BDL/BDL		
BDL - Below Detection Limit of 0.1 parts per billion J - Estimated Value			

**Table 3 - Chronology of PCB analytical Results
Well 3D**

DATE SAMPLED	PCB CONCENTRATION (PPB)	DATE SAMPLED	PCB CONCENTRATION (PPB)
November 19, 1992	BDL	October 22, 1998	BDL/BDL
May 26, 1993	BDL	May 19, 1999	BDL
November 18, 1993	0.6	November 30, 1999	BDL
May 27, 1994	0.11	May 9, 2000	BDL
November 17, 1994	0.2	November 16, 2000	BDL/BDL
May 26, 1995	BDL	February 19, 2001	BDL/BDL
November 30, 1995	BDL	May 8, 2001	BDL
June 13, 1996	BDL	August 8, 2001	BDL
November 20, 1996	BDL	December 4, 2001	BDL
June 24, 1997	BDL	February 12, 2002	BDL/BDL
December 15, 1997	BDL	August 21, 2002	BDL/BDL
May 28, 1998	BDL	March 20, 2003	BDL/BDL
September 23, 1998	BDL	August 1, 2003	BDL/BDL
BDL - Below Detection Limit of 0.1 parts per billion I - Estimated Value		BDL/BDL represents the normal sample and duplicate	

**Table 4 - Chronology of PCB analytical Results
Well 4D**

DATE SAMPLED	PCB CONCENTRATION (PPB)	DATE SAMPLED	PCB CONCENTRATION (PPB)
May 19, 1987	ND	June 12, 1996	BDL
May 3, 1989	ND	November 21, 1996	BDL
November 7, 1989	BDL	June 24, 1997	BDL
May 1, 1990	BDL	December 15, 1997	BDL
November 6, 1990	BDL	May 28, 1998	BDL
May 29, 1991	0.63	September 23, 1998	BDL
June 20, 1991	0.16	October 22, 1998	BDL
July 18, 1991	0.11	May 19, 1999	BDL
August 21, 1991	BDL	November 30, 1999	BDL
September 23, 1991	BDL	May 9, 2000	BDL
October 30, 1991	0.69	November 16, 2000	0.26
November 18, 1991	BDL	February 19, 2001	BDL
May 13, 1992	BDL	May 8, 2001	BDL
November 18, 1992	BDL/BDL	August 9, 2001	BDL/BDL
May 26, 1993	BDL	December 4, 2001	BDL/BDL
November 18, 1993	2.2	February 12, 2002	BDL
May 27, 1994	0.13	August 21, 2002	BDL
November 17, 1994	0.17	March 20, 2003	BDL
May 26, 1995	BDL	August 1, 2003	BDL
November 30, 1995	BDL		
BDL - Below Detection Limit of 0.1 parts per billion I - Estimated Value			
BDL/BDL represents the normal sample and duplicate			

**Table 5 - Chronology of PCB analytical Results
Eads Residential Well**

DATE SAMPLED	PCB CONCENTRATION (PPB)	DATE SAMPLED	PCB CONCENTRATION (PPB)
July 17, 1991	BDL	May 19, 1999	BDL
November 18, 1992	BDL	November 30, 1999	BDL
May 26, 1993	BDL	May 9, 2000	BDL
May 27, 1994	BDL	November 16, 2000	BDL
November 17, 1994	BDL	February 19, 2001	BDL
November 29, 1995	BDL	May 8, 2001	BDL
June 12, 1996	BDL	August 8, 2001	BDL
November 20, 1996	BDL	December 4, 2001	BDL
June 25, 1997	BDL	February 12, 2002	BDL
December 15, 1997	BDL	August 21, 2002	BDL
May 28, 1998	BDL	March 20, 2003	BDL
September 23, 1998	BDL	August 1, 2003	BDL
October 22, 1998	BDL		
BDL - Below Detection Limit of 0.1 parts per billion			
I - Estimated Value			

**Table 6 - Chronology of PCB analytical Results
White Residential Well**

DATE SAMPLED	PCB CONCENTRATION (PPB)	DATE SAMPLED	PCB CONCENTRATION (PPB)
July 17, 1991	BDL	October 22, 1998	BDL
November 18, 1992	BDL	May 19, 1999	BDL
May 26, 1993	BDL	November 30, 1999	BDL
May 27, 1994	BDL	May 9, 2000	BDL
November 17, 1994	BDL	November 16, 2000	BDL
November 29, 1995	BDL	February 19, 2001	BDL
June 12, 1996	0.11UJ	May 8, 2001	BDL
July 19, 1996	BDL	August 8, 2001	BDL
November 20, 1996	BDL	December 4, 2001	BDL
June 25, 1997	BDL	February 12, 2002	BDL
December 15, 1997	BDL	August 21, 2002	BDL
May 28, 1998	BDL	March 20, 2003	BDL
September 23, 1998	BDL	August 1, 2003	BDL
BDL - Below Detection Limit of 0.1 parts per billion I - Estimated Value			